WHAT IS CLAIMED IS:

1   1. A DSL transceiver comprising:

2   a receive section that receives a DSL signal from a DSL channel when the DSL

3   transceiver is connected;

4   a transmit section that transmits a DSL signal from a DSL channel when the DSL

5   transceiver is connected;

6   a DSL traffic detector that detects whether or not non-idle data is being transmitted

7   over the DSL channel; and

8   a selective processing subsection of the receive section that omits at least some of the

9   processing required for reception of data from the DSL channel when the DSL

10   traffic detector detects that non-idle data is not being transmitted over the DSL

11   channel.

1   2. The DSL transceiver of claim 1, wherein the DSL transceiver is a host-

2   signal processing based ADSL transceiver.

1   3. The DSL transceiver of claim 1, further comprising state logic to place

2   the selective processing subsection into a normal state, a sleep state or a warmup state,

3   wherein the warmup state is entered after exiting the sleep state before entering the

4   normal state.